## **CLAIMS**

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## 1. Use of a compound of formula (I)

$$R^3O_2S$$
 (I)

or a pharmaceutically acceptable salt or solvate thereof, in which:

R<sup>1</sup> is selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>1-2</sub>alkyl substituted by one to five fluorine atoms, C<sub>3-6</sub>alkenyl, C<sub>3-6</sub>alkynyl, C<sub>3-10</sub>cycloalkylC<sub>0-6</sub>alkyl, C<sub>4-12</sub>bridged cycloalkyl, A(CR<sup>4</sup>R<sup>5</sup>)<sub>n</sub> and B(CR<sup>4</sup>R<sup>5</sup>)<sub>n</sub>;

R<sup>2</sup> is C<sub>1-2</sub>alkyl substituted by one to five fluorine atoms;

 $R^3$  is selected from the group consisting of  $C_{1-8}$ alkyl,  $NH_2$  and  $R^7CONH$ ;

R<sup>4</sup> and R<sup>5</sup> are independently selected from H or C<sub>1-6</sub>alkyl;

A is selected from the group consisting of unsubstituted 5- or 6-membered heteroaryl,unsubstituted 6-membered aryl, 5- or 6-membered heteroaryl substituted by one or more R<sup>6</sup> and6-membered aryl substituted by one or more R<sup>6</sup>;

R<sup>6</sup> is selected from the group consisting of halogen, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyl substituted by one more fluorine atoms, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkoxy substituted by one or more F, NH<sub>2</sub>SO<sub>2</sub> and C<sub>1-6</sub>alkylSO<sub>2</sub>;

B is a ring selected from the group consisting of

where ) defines the point of attachment of the ring;

is selected from the group consisting of H, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkylOC<sub>1-6</sub>alkyl, phenyl, HO<sub>2</sub>CC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylOCOC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylOCONHC<sub>1-6</sub>alkyl and C<sub>1-6</sub>alkylCONHC<sub>1-6</sub>alkyl; and

n is 0 to 4;

in the preparation of a medicament for the treatment of schizophrenic disorders.

## 2. Use of a compound of formula (II)

or a pharmaceutically acceptable salt or solvate thereof in which:

 $Z^0$  is selected from the group consisting of halogen,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkoxy,  $C_{1-6}$ alkoxy substituted by one or more fluorine atoms, and  $O(CH_2)_nNZ^4Z^5$ ;

are each the same or different and are independently selected from the group consisting of H,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyl substituted by one or more fluorine atoms,  $C_{1-6}$ alkoxy,  $C_{1-6}$ hydroxyalkyl,  $SC_{1-6}$ alkyl, C(O)H,  $C(O)C_{1-6}$ alkyl,  $C_{1-6}$ alkylsulphonyl,  $C_{1-6}$ alkoxy substituted by one or more fluorine atoms,  $O(CH_2)_nCO_2C_{1-6}$ alkyl,  $O(CH_2)_nSC_{1-6}$ alkyl,  $O(CH_2)_nNZ^4Z^5$ ,  $O(CH_2)_nSC_{1-6}$ alkyl and  $O(O)NZ^4Z^5$ ;

with the proviso that when  $Z^0$  is at the 4-position and is halogen, then at least one of  $Z^1$  and  $Z^2$  is  $C_{1-6}$ alkylsulphonyl,  $C_{1-6}$ alkoxy substituted by one or more fluorine atoms,  $O(CH_2)_nCO_2C_{1-6}$ alkyl,  $O(CH_2)_nSC_{1-6}$ alkyl, O

 $Z^3$  is  $C_{1-6}$ alkyl or  $NH_2$ ;

Z<sup>1</sup> and Z<sup>2</sup>

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are each the same or different and are independently selected from the group consisting of H, or C<sub>1-8</sub>alkyl or, Z<sup>4</sup> and Z<sup>5</sup> together with the nitrogen atom to which they are bound, form a 4 - 8 membered saturated heterocyclic ring having 1 or 2 heteroatoms selected from N, O and S; and

n<sup>1</sup> is 1-4;

in the preparation of a medicament for the treatment of schizophrenic disorders.

## 3. Use of a compound of formula (III)

or a pharmaceutically acceptable salt or solvate thereof in which:

	X Y	is selected from the group consisting of oxygen or NQ <sup>2</sup> ; is selected from the group consisting of CH or nitrogen;
5	Q <sup>1</sup>	is selected from the group consisting of H, $C_{1-6}$ alkyl, $C_{1-2}$ alkyl substituted by one to five fluorine atoms, $C_{1-3}$ alkyl $OC_{1-3}$ alkyl, $C_{3-6}$ alkenyl, $C_{3-6}$ alkynyl, $C_{3-10}$ cycloalkyl $C_{0-6}$ alkyl, $C_{4-7}$ cycloalkyl substituted by $C_{1-3}$ alkyl or $C_{1-3}$ alkoxy, $C_{4-12}$ bridged cycloalkyl, $A(CR^6R^7)_n$ and
		B(CR <sup>6</sup> R <sup>7</sup> ) <sub>n</sub> ;
10	$Q^2$	is selected from the group consisting of H and C <sub>1-6</sub> alkyl; or
	Q <sup>1</sup> and Q <sup>2</sup>	together with the nitrogen atom to which they are bound form a 4-8 membered saturated heterocyclic ring or a 5-membered heteroaryl ring heteroaryl ring is unsubstituted or substituted by one R <sup>8</sup> ;
	$Q^3$	is selected from the group consisting of C <sub>1.5</sub> alkyl and C <sub>1.2</sub> alkyl
15	Q	substituted by one to five fluorine atoms;
	Q⁴	is selected from the group consisting of C <sub>1-8</sub> alkyl, NH₂ and R <sup>9</sup> CONH;
	Q <sup>5</sup>	is selected from the group consisting of hydrogen, $C_{1-3}$ alkyl, $C_{1-2}$ alkyl substituted by one to five fluorine atoms, $C_{1-3}$ alkyl $O_2$ C, halogen,
20	Q <sup>6</sup> and Q <sup>7</sup>	cyano, (C <sub>1-3</sub> alkyl) <sub>2</sub> NCO, C <sub>1-3</sub> alkylS and C <sub>1-3</sub> alkylO <sub>2</sub> S;
20	A <sup>1</sup>	are independently H or C <sub>1-6</sub> alkyl;
	<b>A</b>	is selected from the group consisting of unsubstituted 5- or 6-membered heteroaryl unsubstituted 6-membered aryl, 5- or 6-membered heteroaryl substituted by one or more R <sup>8</sup> ; and 6-membered aryl substituted by one or more R <sup>8</sup> ;
25	Q <sup>8</sup>	is selected from the group consisting of halogen, C <sub>1-6</sub> alkyl, C <sub>1-6</sub> alkyl
		substituted by one more fluorine atoms, $C_{1-6}$ alkoxy, $C_{1-6}$ alkoxy substituted by one or more F, $NH_2SO_2$ and $C_{1-6}$ alky $ISO_2$ ;
	B <sup>1</sup>	is a ring selected from the group consisting of

and where defines the point of attachment of the ring;

is selected from the group consisting of H, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkylOC<sub>1-6</sub>alkyl, phenyl, HO<sub>2</sub>CC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylOCOC<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkylOCONHC<sub>1-6</sub>alkyl and

C<sub>1-6</sub>alkylCONHC<sub>1-6</sub>alkyl;

Q<sup>10</sup> is selected from the group consisting of H and halogen; and n is 0 to 4;

in the preparation of a medicament for the treatment of schizophrenic disorders.

4. Use of a compound of formula (I), (II) and (III), as defined in anyone of claims from 1 to 3, and pharmaceutically acceptable salts and solvates thereof, in combination with a neuroleptic drug in the preparation of a medicament for the treatment of schizophrenic disorders such as schizophrenia, delusional disorders, affective disorders, autism and tic disorders.

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- Use of a compound selected from the group consisting of:
  2-(4-fluorophenoxy)-4-[4-(methylsulfonyl)phenyl]-6](trifluoromethyl)pyrimidine;
  2-(4-methoxyphenoxy)-4-[4-(methylsulfonyl)phenyl]-6-trifluoromethyl)pyrimidine;
  - 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine;
- 20 2-[(5-chloropyridin-3-yl)oxy]-4-[4-(methylsulfony)phenyl]-6-(trifluoromethyl)pyrimidine;
  - 2-(cyclohexyloxy)-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine;
  - 3-(4-methylsulfonyl-phenyl)-2-(4-methoxy-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 6-difluoromethoxy-2-(4-fluoro-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]-
- 25 pyridazine;
  - 2-(4-ethoxy-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 2-(4-fluoro-phenyl)-6-methylsulfonyl-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 2-(4-difluoromethoxy-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
- 4-[2-(4-ethoxy-phenyl)-pyrazolo[1,5-b]pyridazin-3-yl]-benzenesulfonamide; 6-difluoromethoxy-2-(3-fluoro-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 3-(4-methanesulfonyl-phenyl)-2-(4-methoxy-phenyl)-pyrazolo[1,5-b]pyridazine;

6-difluoromethoxy-2-(4-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5b]pyridazine; 2-(4-ethoxy-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine; 2-(4-fluoro-phenyl)-6-methanesulfonyl-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-5 b]pyridazine; 2-(4-difluoromethoxy-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5b]pyridazine; 4-[2-(4-ethoxy-phenyl)-pyrazolo[1,5-b]pyridazin-3-yl]-benzenesulfonamide; 6-difluoromethoxy-2-(3-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-10 b]pyridazine 4-ethyl-6-[4-(methylsulfonyl)phenyl]-N-(tetrahydro-2H-pyran-4-ylmethyl)-2pyridinamine;4-methyl-N-[(1-methyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine; N-[(1,5-dimethyl-1H-pyrazol-4-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2-15 pyridinamine: N-[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; 4-(6-{[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]amino}-4-ethyl-2-pyridinyl)benzenesulfonamide; 20 N-[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-[(1,5-dimethyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; 4-{4-methyl-6-[(tetrahydro-2H-pyran-4-ylmethyl)amino]-2-pyridinyl}-25 benzenesulfonamide; 4-methyl-N-[(1-methyl-1H-pyrazol-3-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; N-(cyclohexylmethyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-cyclohexyl-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; 30 2-[4-(methylsulfonyl)phenyl]-6-[(2-pyridinylmethyl)oxy]-4-(trifluoromethyl)pyridine; 4-methyl-N-[(3-methyl-4-isoxazolyl)methyl]-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; 6-[4-(methylsulfonyl)phenyl]-N-(2-pyridinylmethyl)-4-(trifluoromethyl)-2-pyridinamine; N-cycloheptyl-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; 35 N-(cis-4-methylcyclohexyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2pyridinamine; N-(1-ethylpropyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-[(3-methyl-1,2,4-oxadiazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;

N-[(5-methyl-1,2,4-oxadiazol-3-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;

4-methyl-N-[(1-methyl-1H-pyrazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;

5 N-(cyclopentylmethyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine;

N-[(1-ethyl-1H-1,2,4-triazol-5-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;

4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-[(2-pyridinylmethyl)amino]-3-

10 pyridinecarbonitrile;

4-ethyl-2-{[(5-methyl-2-pyridinyl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;

4-ethyl-2-{[(6-methyl-3-pyridinyl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;

4-ethyl-2-{[(1-methyl-1H-pyrazol-4-yl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;

4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-{[(4-methyl-1,3-thiazol-2-yl)methyl]amino}-3-pyridinecarbonitrile;

4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-[(2-pyridinylmethyl)oxy]-3-pyridinecarbonitrile;

4-ethyl-N-[(1-ethyl-1H-1,2,4-triazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;

4-ethyl-2-{[(6-methyl-3-pyridinyl)methyl]oxy}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;

6-[4-(methylsulfonyl)phenyl]-N-[(1-methyl-1H-1,2,4-triazol-5-yl)methyl]-4-(trifluoromethyl)-2-pyridinamine; and pharmaceutically acceptable salts and solvates

thereof in the preparation of a medicament for the treatment of schizophrenic disorders.

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Use according to Claim 5, wherein the compound is 2-butoxy-4-[4 (methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine or a pharmaceutical acceptable salt or solvate thereof.

7. Use according to Claim 4, characterised in that the neuroleptic is selected from clozapine, olanzapine, ziprasidone, risperidone, aripiprazole, quetiapine, quetiapine fumarate, sertindole, amisulpride, haloperidol, haloperidol decanoate, haloperidol lactate, chlorpromazine, fluphenazine, fluphenazine decanoate, fluphenazine enanthate, fluphenazine hydrochloride, thiothixene, thiothixene hydrochloride, trifluoperazine, perphenazine, amitriptyline, thioridazine, mesoridazine, molindone, molindone hydrochloride, loxapine, loxapine hydrochloride, loxapine succinate,

pimozide, flupenthixol, promazine, triflupromazine, chlorprothixene, droperidol, actophenazine, prochlorperazine, methotrimeprazine, pipotiazine, ziprasidone, hoperidone, zuclopenthixol, and mixtures thereof.

5 8. Use according to Claim 4, wherein the neuroleptic is risperidone or aripiprazole.

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- 9. Use of 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine or a pharmaceutical acceptable salt thereof, in combination with risperidone in an amount of 0.8-3.0 mg/kg and 2-6 mg, respectively, in the preparation of a medicament for the treatment of schizophrenic disorders such as schizophrenia, delusional disorders, affective disorders, autism and tic disorders.
- 10. Use according to Claim 9, wherein risperidone is administered in an amount of 4-5 mg.
- 11. Use according to any one of Claims 1 to 10, for the preparation of a medicament for oral administration.
- 12. Kit-of-parts suitable for use in the treatment of schizophrenic disorders such as schizophrenia, delusional disorders, affective disorders, autism or tic disorders, schizophreniform disorders, in particular chronic schizophrenic psychoses and schizoaffective psychoses, temporary acute psychotic disorders, comprising a first dosage form comprising a neuroleptic drug and a second dosage form comprising a compound of formula (I) (II) and (III) as defined in anyone of claim from 1 to 3 or a pharmaceutical acceptable salt or solvate thereof, for simultaneous, separate or sequential administration.
  - 13. Kit-of-parts according to Claim 12, characterised in that the neuroleptic is selected from the group consisting of: clozapine, olanzapine, ziprasidone, risperidone, quetiapine, quetiapine fumarate, sertindole, amisulpride, haloperidol, haloperidol decanoate, haloperidol lactate, chlorpromazine, fluphenazine, fluphenazine decanoate, fluphenazine enanthate, fluphenazine hydrochloride, thiothixene. thiothixene hydrochloride, trifluoperazine, perphenazine, amitriptyline, thioridazine, mesoridazine, molindone, molindone hydrochloride. loxapine. loxapine hydrochloride, loxapine succinate, pimozide, flupenthixol, promazine, triflupromazine, chlorprothixene, droperidol, actophenazine, prochlorperazine, methotrimeprazine, pipotiazine, ziprasidone, hoperidone, zuclopenthixol, and mixtures thereof.

14. Kit-of-parts according to Claims 12 and 13, further comprising a compound selected from the group consisting of: celecoxib, rofecoxib, meloxicam, piroxicam, deracoxib, parecoxib, valdecoxib, etoricoxib, a chromene derivative, a chroman derivative, N-(2-cyclohexyloxynitrophenyl) methyl sulfonamide, COX189, ABT963 or JTE-522, or pharmaceutical acceptable salts or solvates thereof.

15. Kit-of-parts according to anyone of Claims from 12 to 14, wherein said compound is 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine or a pharmaceutical acceptable salt thereof and said neuroleptic drug is risperidone.

16. Kit-of-parts according to Claim 15, wherein 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine or a pharmaceutical acceptable salt thereof and risperidone are in an amount of 0.8-3.0 mg/kg mg and 2-6 mg, respectively.

- 15. A method for the treatment of a schizophrenic disorder in a mammal in need thereof, said method comprising administering to said mammal a therapeutically effective amount of a compound according to any of claims 1-3.
  - 18. The method according to claim 17, wherein said mammal is human.

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- 19. The method according to claim 18, wherein said schizophrenic disorder is selected from the group consisting of schizophrenia, delusional disorders, affective disorders, autism or tic disorders, schizophreniform disorders, in particular chronic schizophrenic psychoses and schizoaffective psychoses, temporary acute psychotic disorders.
- 20. The method according to claim 19, further comprising administering a therapeutically effective amount of a a neuroleptic drug.
- 30 21. The method according to claim 20, wherein said neuroleptic drug is selected from the group consisting of: clozapine, olanzapine, ziprasidone, risperidone, quetiapine, quetiapine fumarate, sertindole, amisulpride, haloperidol, haloperidol decanoate, haloperidol lactate, chlorpromazine, fluphenazine, fluphenazine decanoate, fluphenazine enanthate, fluphenazine hydrochloride, thiothixene, thiothixene amitriptyline, 35 hydrochloride, trifluoperazine, perphenazine, thioridazine, mesoridazine. molindone, molindone hydrochloride. loxapine. loxapine hydrochloride, loxapine succinate, pimozide, flupenthixol, promazine, chlorprothixene, droperidol, actophenazine, prochlorperazine, triflupromazine.

methotrimeprazine, pipotiazine, ziprasidone, hoperidone, zuclopenthixol, and mixtures thereof.

- 22. A method for the treatment of a schizophrenic disorder in a mammal in need thereof, said method comprising administering to said mammal a therapeutically effective amount of a compound, the compound is selected from the group consisting of:
  - 2-(4-fluorophenoxy)-4-[4-(methylsulfonyl)phenyl]-6](trifluoromethyl)pyrimidine;
  - 2-(4-methoxyphenoxy)-4-[4-(methylsulfonyl)phenyl]-6-trifluoromethyl)pyrimidine;
- 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine; 2-[(5-chloropyridin-3-yl)oxy]-4-[4-(methylsulfony)phenyl]-6-

(trifluoromethyl)pyrimidine;

- 2-(cyclohexyloxy)-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine:
- 3-(4-methylsulfonyl-phenyl)-2-(4-methoxy-phenyl)-pyrazolo[1,5-b]pyridazine;
- 6-difluoromethoxy-2-(4-fluoro-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]-pyridazine;
  - 2-(4-ethoxy-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 2-(4-fluoro-phenyl)-6-methylsulfonyl-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
- 2-(4-difluoromethoxy-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine; 4-[2-(4-ethoxy-phenyl)-pyrazolo[1,5-b]pyridazin-3-yl]-benzenesulfonamide; 6-difluoromethoxy-2-(3-fluoro-phenyl)-3-(4-methylsulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 3-(4-methanesulfonyl-phenyl)-2-(4-methoxy-phenyl)-pyrazolo[1,5-b]pyridazine;
- 6-difluoromethoxy-2-(4-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 2-(4-ethoxy-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 2-(4-fluoro-phenyl)-6-methanesulfonyl-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
- 2-(4-difluoromethoxy-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine;
  - 4-[2-(4-ethoxy-phenyl)-pyrazolo[1,5-b]pyridazin-3-yl]-benzenesulfonamide; 6-difluoromethoxy-2-(3-fluoro-phenyl)-3-(4-methanesulfonyl-phenyl)-pyrazolo[1,5-b]pyridazine
- 4-ethyl-6-[4-(methylsulfonyl)phenyl]-N-(tetrahydro-2H-pyran-4-ylmethyl)-2-pyridinamine;4-methyl-N-[(1-methyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
  - N-{(1,5-dimethyl-1H-pyrazol-4-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;

N-[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; 4-(6-{[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]amino}-4-ethyl-2-pyridinyl)benzenesulfonamide; N-[(1,3-dimethyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-5 (trifluoromethyl)-2-pyridinamine; N-[(1,5-dimethyl-1H-pyrazol-4-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; 4-{4-methyl-6-[(tetrahydro-2H-pyran-4-ylmethyl)amino]-2pyridinyl}benzenesulfonamide; 10 4-methyl-N-[(1-methyl-1H-pyrazol-3-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; N-(cyclohexylmethyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-cyclohexyl-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; 2-[4-(methylsulfonyl)phenyl]-6-[(2-pyridinylmethyl)oxy]-4-(trifluoromethyl)pyridine; 15 4-methyl-N-[(3-methyl-4-isoxazolyl)methyl]-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; 6-[4-(methylsulfonyl)phenyl]-N-(2-pyridinylmethyl)-4-(trifluoromethyl)-2-pyridinamine; N-cycloheptyl-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-(cis-4-methylcyclohexyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-20 pyridinamine; N-(1-ethylpropyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-[(3-methyl-1,2,4-oxadiazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-pyridinamine; N-[(5-methyl-1,2,4-oxadiazol-3-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-4-25 (trifluoromethyl)-2-pyridinamine; 4-methyl-N-[(1-methyl-1H-pyrazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; N-(cyclopentylmethyl)-6-[4-(methylsulfonyl)phenyl]-4-(trifluoromethyl)-2-30 pyridinamine; N-[(1-ethyl-1H-1,2,4-triazol-5-yl)methyl]-4-methyl-6-[4-(methylsulfonyl)phenyl]-2pyridinamine; 4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-[(2-pyridinylmethyl)amino]-3pyridinecarbonitrile; 4-ethyl-2-{[(5-methyl-2-pyridinyl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-35 pyridinecarbonitrile; 4-ethyl-2-{[(6-methyl-3-pyridinyl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3pyridinecarbonitrile;

4-ethyl-2-{[(1-methyl-1H-pyrazol-4-yl)methyl]amino}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;

4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-{[(4-methyl-1,3-thiazol-2-yl)methyl]amino}-3-pyridinecarbonitrile;

- 4-ethyl-6-[4-(methylsulfonyl)phenyl]-2-[(2-pyridinylmethyl)oxy]-3-pyridinecarbonitrile; 4-ethyl-N-[(1-ethyl-1H-1,2,4-triazol-5-yl)methyl]-6-[4-(methylsulfonyl)phenyl]-2-pyridinamine;
  - 4-ethyl-2-{[(6-methyl-3-pyridinyl)methyl]oxy}-6-[4-(methylsulfonyl)phenyl]-3-pyridinecarbonitrile;
- 10 6-[4-(methylsulfonyl)phenyl]-N-[(1-methyl-1H-1,2,4-triazol-5-yl)methyl]-4-(trifluoromethyl)-2-pyridinamine; and pharmaceutically acceptable salts and solvates thereof
  - 23. The method according to claim 22, wherein said mammal is human.

- 24. The method according to claim 23, wherein said schizophrenic disorder is selected from the group consisting of schizophrenia, delusional disorders, affective disorders, autism or tic disorders, schizophreniform disorders, in particular chronic schizophrenic psychoses and schizoaffective psychoses, temporary acute psychotic disorders.
  - 25. The method according to claim 24, further comprising administering a therapeutically effective amount of a a neuroleptic drug.
- 25 26. The method according to claim 25, wherein said neuroleptic drug is selected from the group consisting of: clozapine, olanzapine, ziprasidone, risperidone, quetiapine, quetiapine fumarate, sertindole, amisulpride, haloperidol, haloperidol decanoate, haloperidol lactate, chlorpromazine, fluphenazine, fluphenazine decanoate, fluphenazine enanthate, fluphenazine hydrochloride, thiothixene, thiothixene 30 hydrochloride, trifluoperazine, perphenazine, amitriptyline, thioridazine, mesoridazine. molindone. molindone hydrochloride, loxapine, loxapine hydrochloride. loxapine succinate, pimozide, flupenthixol, promazine, triflupromazine, chlorprothixene, droperidol, actophenazine, prochlorperazine, methotrimeprazine, pipotiazine, ziprasidone, hoperidone, zuclopenthixol, and 35 mixtures thereof.
  - 27. A method for the treatment of a schizophrenic disorder in a mammal in need thereof, said method comprising administering to said mammal a therapeutically

effective amount of 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)-pyrimidine or a pharmaceutical acceptable salt or solvate thereof.

28. The method according to claim 27, wherein said mammal is human.

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- 29. The method according to claim 28, wherein said schizophrenic disorder is selected from the group consisting of schizophrenia, delusional disorders, affective disorders, autism or tic disorders, schizophreniform disorders, in particular chronic schizophrenic psychoses and schizoaffective psychoses, temporary acute psychotic disorders.
- 30. The method according to claim 28, further comprising administering a therapeutically effective amount of a a neuroleptic drug.
- 15 31. The method according to claim 30, wherein said neuroleptic drug is selected from the group consisting of: clozapine, olanzapine, ziprasidone, risperidone, quetiapine, quetiapine fumarate, sertindole, amisulpride, haloperidol, haloperidol decanoate, haloperidol lactate, chlorpromazine, fluphenazine, fluphenazine decanoate, fluphenazine enanthate, fluphenazine hydrochloride, thiothixene, thiothixene 20 hydrochloride, trifluoperazine, perphenazine, thioridazine, amitriptyline, molindone, molindone mesoridazine, hydrochloride, loxapine, loxapine hydrochloride. **loxapine** pimozide, succinate. flupenthixol. promazine, triflupromazine, chlorprothixene, droperidol, actophenazine, prochlorperazine, methotrimeprazine, pipotiazine, ziprasidone, hoperidone, zuclopenthixol, and 25 mixtures thereof.
  - 32. The method according to claim 31, wherein said compound is 2-butoxy-4-[4-(methylsulfonyl)phenyl]-6-(trifluoromethyl)pyrimidine or a pharmaceutical acceptable salt thereof and said neuroleptic drug is risperidone.

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33. The method according to claim 32, wherein said compound and said neuroleptic drug are present in an amount of 0.8-3.0 mg/kg mg and 2-6 mg respectively.